

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 – 10. *(Cancelled)*

11. (New) A radio wave lens antenna comprising:

 a hemispherical radio wave lens for focusing radio wave beams;

 a reflective plate attached to a half-cut surface of the sphere of the radio wave lens for reflecting radio waves incoming from the sky or radiated toward targets; and

 primary feeds positioned at arbitrary radio wave focus points of the radio wave lens for transmitting or receiving the radio waves,

 wherein each primary feed includes a dielectric-loaded waveguide antenna where a dielectric body is loaded at an end opening of a waveguide and two of the primary feeds are installed closely and centers of the ends of the dielectric bodies of the two closely disposed primary feeds are disposed at off-centered positions in a direction that the centers are remotely spaced apart from each other to be located off the extension of each waveguide's center axis.

12. (New) A radio wave lens antenna comprising:

 a spherical radio wave lens for focusing radio wave beams; and

 primary feeds positioned at arbitrary radio wave focus points of the radio wave lens for transmitting or receiving the radio waves,

 wherein each primary feed includes a dielectric-loaded waveguide antenna where a dielectric body is loaded at an end opening of a waveguide and two of the primary feeds are installed closely and centers of the ends of the dielectric bodies of the two closely disposed primary feeds are disposed at off-centered positions in a direction that the centers are remotely spaced apart from each other to be located off the extension of each waveguide's center axis.

13. (New) The radio wave lens antenna of claim 11, wherein the dielectric-loaded waveguide antenna is a dielectric-loaded rectangular waveguide antenna where the dielectric body is loaded at the end opening of a rectangular waveguide.

14. (New) The radio wave lens antenna of claim 12, wherein the dielectric-loaded waveguide antenna is a dielectric-loaded rectangular waveguide antenna where the dielectric body is loaded at the end opening of a rectangular waveguide.

15. (New) The radio wave lens antenna of claim 11, wherein the dielectric body of the dielectric-loaded waveguide antenna is protruded forward from the waveguide and a protruded portion of the dielectric body is of a taper shape having a thinned end.

16. (New) The radio wave lens antenna of claim 12, wherein the dielectric body of the dielectric-loaded waveguide antenna is protruded forward from the waveguide and a protruded portion of the dielectric body is of a taper shape having a thinned end.

17. (New) The radio wave lens antenna of claim 11, wherein the dielectric body is protruded forward from the waveguide and a part of an outer periphery of a protruded portion of the dielectric body is removed along a plane of a direction intersecting a cross section of the waveguide.

18. (New) The radio wave lens antenna of claim 12, wherein the dielectric body is protruded forward from the waveguide and a part of an outer periphery of a protruded portion of the dielectric body is removed along a plane of a direction intersecting a cross section of the waveguide.

19. (New) The radio wave lens antenna of claim 15, wherein in a plane including a cross section of the protruded portion of the dielectric body protruded forward from the waveguide, a dimension of the protruded portion in a disposed direction of the primary feeds is smaller than that in a direction normal to the disposed direction of the primary feeds.

20. (New) The radio wave lens antenna of claim 16, wherein in a plane including a cross section of the protruded portion of the dielectric body protruded forward from the waveguide, a dimension of the protruded portion in a disposed direction of the primary feeds is smaller than that in a direction normal to the disposed direction of the primary feeds.

21. (New) The radio wave lens antenna of claim 17, wherein in a plane including a cross section of the protruded portion of the dielectric body protruded forward from the waveguide, a dimension of the protruded portion in a disposed direction of the primary feeds is smaller than that in a direction normal to the disposed direction of the primary feeds.

22. (New) The radio wave lens antenna of claim 18, wherein in a plane including a cross section of the protruded portion of the dielectric body protruded forward from the waveguide, a dimension of the protruded portion in a disposed direction of the primary feeds is smaller than that in a direction normal to the disposed direction of the primary feeds.

23. (New) The radio wave lens antenna of claim 15, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

24. (New) The radio wave lens antenna of claim 16, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

25. (New) The radio wave lens antenna of claim 17, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

26. (New) The radio wave lens antenna of claim 18, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

27. (New) The radio wave lens antenna of claim 19, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

28. (New) The radio wave lens antenna of claim 20, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

29. (New) The radio wave lens antenna of claim 21, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.

30. (New) The radio wave lens antenna of claim 22, wherein an end of the dielectric body protruded from the waveguide is cut out such that the end of the dielectric body is of flat or a round shape.